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EXAMINER

SMALLEY, JAMES N

ART UNIT

PAPER NUMBER

3727

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/009,306

Applicant(s)

SHOWERING, FRANCIS

Examiner

James N Smalley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 33-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 33-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 45 is objected to because of the following informalities:

It is suggested the Applicant reword the claim to read, “made of,” or, “formed of.”

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

To the best degree the Examiner understands the claimed subject matter, the “engagement means” comprises projections (22) and the “means for bracing” comprise integral band (30). Because this band is integral to the closure in all embodiments of the Applicant’s disclosure, it is unclear how the integral band (30) can be considered “removable.”

Regarding claim 37, the phrase, “at least about,” is indefinite. Examiner notes the term “about” implies values that are slightly greater or less than the stated value; in this case, 5 cm. The term “at least” serves to limit all values to above 5 cm. Therefore, the two terms conflict, while trying to limit the dimensions of the claimed closure.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 33, 36, 39-49, 52-53 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Grussen '648.

Grussen '648 discloses a Plastic Bottle Cap with Integral Handle, comprising:

(cl. 1) a container mouth and a closure therefore, the closure comprising means for engaging the mouth (12) and removable means (1) for bracing the engagement means to lock it in an engaged position.

Regarding claims 33, 36 and 39-46, Grussen '648 discloses a container mouth and a closure therefore, the closure comprising an engagement device (12) configured for interlocking with a formation around the mouth to retain the closure on the mouth, and a band (1) for bracing the engagement device to lock it in an engaged condition by resisting outward movement of the engagement device when the band is in a bracing position; characterized in that:

in an operative position of the closure on the container mouth and prior to the first time the closure is removed, the band is integrally coupled to the closure by a plurality of integral frangible connections (15), the band being movable relative to the engagement device out of its bracing position, and the frangible connections being breakable sequentially when the band is moved out of its bracing position for the first time,

(Examiner notes col. 2, lines 31-34, wherein it is disclosed the pull ring is, “capable of reinforcing the effect of the principal means for holding the cap on the bottle.”)

(cl. 36) further comprising a plurality of ridges (6) on the surface of the closure facing the band,

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(cl. 39) further comprising cooperating abutment surfaces for producing at least one mechanical interlock between the bracing band and the engagement device for communicating tension in the bracing band to the engagement device,

(Examiner notes fig. 10, wherein it can be seen the engagement lugs (12) mechanically interlock with the neck of the bottle. The Applicant discloses that ..

(cl. 40) wherein the engagement device is segmented,

(cl. 41) wherein the engagement device comprises one or more lugs which engage one or more undercuts adjacent to the container mouth,

(cl. 42) wherein the undercut comprises a rim around the container mouth,

(cl. 43) wherein at least one of the lugs comprises a locking projection, the locking projection comprising a lead-in ramp surface, and an abutment surface,

(cl. 44) wherein the abutment surface is inclined at an angle whose magnitude is less than that of the inclination of the ramp surface,

(cl. 45) wherein the closure is [made] of plastics,

(cl. 46) wherein the closure is refittable to the container mouth after it has been removed for the first time.

(Examiner notes col. 2, lines 14-16, wherein it is disclosed it is possible to re use the cap.)

Grussen '648 further discloses the limitations of claims 47-48. Examiner notes the ring is hinged, between notches (2).

Regarding claim 49, Grussen '648 discloses all structural limitations. Examiner notes the bracing effect, enabled by Grussen '648 in col. 2, lines 31-34, as cited above for claim 33, will inherently be released as the frangible elements holding the band to the closure are snapped.

Regarding claim 52, Grussen '648 discloses:

an upper wall (8), a side wall or wall segment (3) depending from the upper wall, an engagement formation (12) on a radially inner face of the side wall of wall segment, and a bracing band (1) for bracing the side wall or wall segment to restrain radial outward movement thereof; characterized in that:

the bracing band is integral with the closure and is joined thereto by a plurality of spaced apart frangible connections (15), and in that the bracing band is mounted radially outside the side wall segment carrying the engagement formation,

(cl. 53) wherein the band is mounted for hinged movement relative to the closure upon shearing of the frangible connections,

(cl. 55) further comprising a plurality of ridges (6) on a surface of the closure facing the bracing band.

6. Claims 50, 52 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Jamer '920.

Regarding claim 50, Jamer '920 discloses a Self Locking Container Closure, comprising:

a container mouth and a closure therefore, the closure comprising an engagement device (72) configured for interlocking with a formation (24) around the mouth to retain the closure on the mouth, and a band (62) for bracing the engagement device to lock it in an engaged condition

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by resisting outward movement of the engagement device when the band is in a bracing position; characterized by:

cooperating abutment surfaces (66, 68) for producing at least one mechanical interlock between the band and the engagement device in a circumferential direction, to restrict movement of the band relative to the engagement device in the circumferential direction.

Regarding claims 52 and 56, James '920 discloses the claimed invention, comprising:

an upper wall, a side wall or wall segment depending from the upper wall, an engagement formation (40) on a radially inner face of the side wall or wall segment, and a bracing band (62) for bracing the side wall or wall segment to restrain radial outward movement thereof; characterized in that:

the bracing band is integral with the closure and is joined thereto by a plurality of spaced apart frangible connections (70), and in that the bracing band is mounted radially outside the side wall segment carrying the engagement formation,

(cl. 56) further comprising cooperating abutment surfaces (66, 68) for forming at least one mechanical interlock between the bracing band and the wall or wall segment for communicating tension in the bracing band to the wall or wall segment.

(Examiner notes tear strip (62) is used in place of (30), which is disclosed in col. 5, lines 4-6, that it, "keeps the lower edges of the skirt from radially expanding.")

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 34-35, 37, 38, 51 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grussen '648.

Regarding claims 34 and 54, Grussen '648 does not disclose wherein the frangible connections are collapsible without shearing, to permit limited outward deformation of the engagement device.

Examiner notes the cap, and therefore the frangible bridges, are formed of plastic, as are the frangible bridges of the present application. Further plastics are known to be flexible and resilient, without breaking.

Therefore, it is inherent that the frangible bridges of Grussen '648 would collapse without shearing, because they are similarly formed of plastics.

Regarding claim 35, Grussen '648 discloses wherein the container has a mouth having a larger configuration than the engagement device of the closure in an unstressed condition of the engagement device, but does not explicitly disclose such that when the closure is fitted to the container, the engagement device and the band are stressed.

Examiner notes that it can be clearly seen in in fig. 10 (this figure shows a bottle configuration; Examiner is not citing the embodiment of the closure in the figure) that the bottle mouth has a wider configuration than the engagement device (11), i.e. in an unstressed condition, i.e. before fitting the closure to the bottle. As the cap is fit over the bottle, the engagement device (11) must flex outwardly to accommodate the mouth of the bottle, thus stressing the engagement device, and, consequently stressing the band.



Regarding claim 37, Grussen '648 does not disclose wherein the container mouth has a lateral dimension of at least about 5 cm.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the lateral dimensions of the cap to 5 cm, or any other desired value, so as to obtain a proper fit closure for a given bottle.

Regarding claim 38, Grussen '648 does not disclose the closure being able to withstand an internal pressure of at least 60 psi.

Examiner notes the teachings of Grussen '648, in col. 3, lines 57-61, wherein it is disclosed the depression (8) on the top of the cap prevents swelling of the capsule during pasteurization. The Specification of the present invention discloses that pressures during pasteurization can reach up to 100 psi.

It is therefore clear that by being able to withstand pasteurization pressures, which the applicant discloses can reach up to 100 psi, that the closure of Grussen '648 is inherently capable of withstanding pressures of at least 60 psi.

Regarding claim 51, Grussen '648 discloses all the structural limitations of the claim.

Grussen '648 further discloses wherein the mouth has a larger configuration than the engagement device of the closure in an unstressed condition of the engagement device, but does not explicitly disclose when the closure is in its operative position on the container mouth, the engagement device is stressed outwardly and the band is maintained in a state of static tension, the tension increasing the bracing effect of the band on the engagement device.

Examiner notes that it can be clearly seen in in fig. 10 (this figure shows a bottle configuration; Examiner is not citing the embodiment of the closure in the figure) that the bottle

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mouth has a wider configuration than the engagement device (11), i.e. in an unstressed condition, i.e. before fitting the closure to the bottle. Further, examiner cites col. 1, lines 40-41, wherein it is disclosed the cap, "is capable of resisting high internal pressures in the bottle." In operation, the bottle contains a carbonated beverage which causes high internal pressure. This pressure inherently forces upward on the cap. This upward force urges engagement device (11) up past the wide portion of the bottle mouth. Resisting this forcing is the band (1). It is therefore inherent that the force of the engagement device (11) pressing outward on the band (1) will tense the band to some degree.

9. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grussen '648, in view of Ohmi et al. '217.

Grussen '648 does not disclose a plurality of sidewall segments.

Ohmi et al. '217 disclose a Resin Cap, comprising sidewall segments separated by cuts (9), and further teach, in col. 6, lines 23-26, that the cuts allow the skirt to "broaden diametrically outward."

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the sidewall of Grussen '648 with cuts, as disclosed by Ohmi et al. '217, so as to provide a plurality of sidewall segments which will allow the cap to broaden diametrically outward and thus reduce stresses on the cap during the application process.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 6,116,444

US 4,216,872

US 5,303,837	US 3,976,215
US 4,625,890	US 3,589,543
US 4,534,481	US 2,186,518
US 4,230,229	

Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, “should be directed to the group clerical personnel and not to the examiners. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information without contacting the examiners”, M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, email [CustomerService3700@uspto.gov](mailto:CustomerService3700@uspto.gov).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James N Smalley whose telephone number is (703) 605-4670. The examiner can normally be reached on M-Th 8-5:30, Alternate Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Lee Young can be reached on (703) 308-2572. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

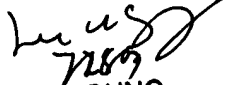
Other helpful telephone numbers are listed for applicant's benefit.

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jns  
July 17, 2003

  
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